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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,054	12/23/2005	Naoki Hashiguchi	025260-105	4344
21839 7590 05/22/2007 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER KRUER, STEFAN	
			ART UNIT 3654	PAPER NUMBER
			MAIL DATE 05/22/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/562,054	HASHIGUCHI	
	Examiner	Art Unit	
	Stefan Kruer	3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 - 3, 7 - 20 is/are rejected.
- 7) ☒ Claim(s) 4 - 6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>17 NOV 2006 & 23 DEC 2005</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 – 4, 7 and 11 - 15 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over **Claims 1 – 6 and 10** of copending Application No. 10/567,034 for which an allowance for patentability has been issued.

Although the conflicting claims are not identical, they are not patentably distinct from each other because:

- **Claim 1** of the instant invention recites an elevator car having a wall portion with a recess and a guide shoe mounted on the car and at least partially within said recess, whereas **Claim 1** of the copending application recites the similar and the copending application cites first and second pairs of opposed corner portions, each of which having a chamfered portion, as subsequently recited in **Claim 4** of the instant invention.

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- **Claim 1** of the copending application recites further rope connection portions along at least one of the second pair of opposed corner portions, as recited in **Claims 4 and 15** of the instant invention.
- **Claim 2** of the instant invention recites first and second car guide shoes engaging, thereby implicitly first and second guide rails, whereas **Claim 4 and 5** of the copending application recite first and second car guide shoes engaging first and second guide rails, whereby the guide shoes are provided in a first and second groove portion, which the instant invention recites as a region surrounded by an extended straight line in **Claim 3**.
- **Claim 4** of the instant invention and Claims 1 and 10 of the copending application, respectively, recite third and fourth recesses (first and second pairs of chamfered portions) and suspending member connection portions (rope connecting portions) along the recesses (opposed corner portions).
- **Claim 7** of the instant invention and **Claim 5** of the copending application recite the recess (groove) as extending continuously in a vertical direction.
- **Claim 11 and 12** of the instant invention and **Claims 6 and 1** of the copending application recite the guide rail is at least partially disposed in the recess (groove portion) and the recess is a chamfered portion, respectively.
- **Claim 13 and 14** of the instant invention and **Claim 3** of the copending application recite the first and second guide rails having centerlines parallel to one another as well as on an identical straight line (disposed within the hoistway in opposition to the first and second vertical columns (sic)).

These are provisional obviousness-type double patenting rejections because the conflicting claims have not in fact been patented.

Claim Objections

Claim 20 is objected to because of the following informalities: In Line 5, "an safety device" should be written as "a safety device". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites the "...between car guide rail rear faces..." There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 9 – 11, 13 - 15 and 17 – 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Masumoto (JP-64069489).

Re: Claim 1, Masumoto discloses an elevator apparatus comprising:

- a car (21) having a wall portion (22), for being raised and lowered within a hoistway (30);
- a car guide rail (31) installed within the hoistway, for guiding the car when the car is raised and lowered;
- and a car guide shoe (27, 29) mounted on the car, for engaging with the car guide rail, wherein the wall portion is provided with a recess, and the car guide shoe is at least partially disposed in the recess (25) on a vertical projection plane.

Re: Claim 9, Masumoto discloses:

- his wall portion having a front face (opposite 5) provided with a car entrance (22a),
- a rear face (by 22) facing the front face,
- a first side face and a second side face facing the first side face (each accommodating 25),
- and a second recess (25) provided in the second side face.

Re: Claim 10, Masumoto discloses:

- the car guide rail includes a first car guide rail opposed to the first recess, and a second car guide rail opposed to the second recess;
- the car is provided on the first side face side with a first suspending member connecting portion (for 33) to which a first main suspending member (33) for suspending the car is connected;
- the car is provided on the second side face side with a second suspending member (for 33) connecting portion to which a second main rope suspending member (33) for suspending the car is connected;
- and the first car guide rail and the second car guide rail have a pitch between car guide rail rear faces which is set equal to or smaller than a car suspension pitch (rope portion running behind guide rail, Fig. 1).

Re: Claim 11, Masumoto discloses the car guide rail is at least partially disposed in the recess on the vertical projection plane.

Re: Claims 13 – 14, Masumoto discloses first and second guide rails having centerlines parallel to one another as well as on an identical straight line (disposed opposite from one another).

Re: Claim 15, Masumoto discloses his car is provided with a suspending member connecting portion (about 33) to which a main rope suspending member (33) for suspending the car is connected and his suspending member connecting portion is disposed in the recess common to the car guide shoe on the vertical projection plane.

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Re: Claim 17, though Matsumoto is silent regarding a car door drive and a plurality of car doors that overlap one another in a door-open state, the implementation of car door drives and overlapping doors are well known in the art.

Re: Claim 18, Masumoto discloses:

- a drive device having a drive sheave (32);
- a first main suspending member (33) and a second main suspending member (33) wound around the drive sheave;
- a car (21) having a first suspending member connecting portion (24) to which the first main suspending member is connected and a second suspending member connecting portion (24) to which the second main rope suspending member is connected, for being raised and lowered within a hoistway through a driving force of the drive device;
- and a first car guide rail (31) and a second car guide rail (31) installed within the hoistway, for guiding the car when the car is raised and lowered,
- wherein the first car guide rail and the second car guide rail have a pitch between car guide rail rear faces which is set equal to or smaller than a car suspension pitch defined by the first main rope suspending member and the second main rope suspending member, in a width direction of the car (rope portion running behind guide rail, Fig. 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 – 3, 7 – 8, 12 and 18 - 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masumoto in view of Kamioka (JP-10139327).

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Re: Claims 2 and 19, Masumoto discloses:

- his wall portion having a front face (opposite 5) provided with a car entrance (22a),
- a rear face (by 22) facing the front face,
- a first side face and a second side face facing the first side face (each accommodating 25);

however, Matsumoto is silent regarding his wall portion provided with a recess in a corner portion between the front face and the first side face.

Attention is directed to Kamioka who teaches his car (4, Fig. 1) having a recess a corner portion between his front face and his first side face (lower right corner), as well as his car guide shoes (41) and his car guide rails (3) provided in the first and second recesses, for reduction of a cross-sectional area of his hoistway (2).

It would have been obvious to one of ordinary skill in the art to modify the reference of Matsumoto with the teaching of Kamioka for the benefits of saving space as well as enhanced accessibility in terms of dual access portals to the elevator car.

Re: Claim 3, Kamioka teaches his car guide shoes of his car disposed substantially inside a region surrounded by a straight line extending along at least one of a front face (parallel to 5, lower) and a rear face (across from 5, lower) and a straight line extending along a side face of the car, when projected onto the horizontal plane, in keeping with a reduction in hoistway area.

Re: Claim 7, Matsumoto discloses his recess is continuously provided along a direction in which his car is raised and lowered.

Re: Claim 8, though Matsumoto is silent regarding a percentage of a cross-section of the guide shoe that is accommodated in the recess, the disclosure of the instant invention lacks criticality in specifying a definite percentage.

Furthermore, it would have been an obvious matter of design choice to accommodate 80% of the cross-section of the guide shoe within the recess, since such a modification would have involved a mere change in size of the component. A change

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in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Re: Claim 12, Masumoto is silent regarding the recess is a chamfered portion provided in a corner portion of the car.

Attention is directed to Kamioka who teaches his chamfered portion provided in a corner portion of the car for reduction of cross-sectional area of his hoistway.

It would have been obvious to one of ordinary skill in the art to modify the reference of Matsumoto with the teaching of Kamioka for the benefits of saving space.

Re: Claim 18, Masumoto discloses:

- the car guide rail includes a first car guide rail opposed to the first recess, and a second car guide rail opposed to the second recess;
- the car is provided on the first side face side with a first suspending member connecting portion (for 33) to which a first main suspending member (33) for suspending the car is connected;
- the car is provided on the second side face side with a second suspending member (for 33) connecting portion to which a second main rope suspending member (33) for suspending the car is connected;
- and the first car guide rail and the second car guide rail have a pitch between car guide rail rear faces which is set equal to or smaller than a car suspension pitch (rope portion running behind guide rail, Fig. 1).

Claims 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masumoto in view of Mitsui (EP 1 319 627 A1).

Masumoto discloses his drive device provided in a lower portion of his hoistway and his drive device disposed so that a rotating shaft of a drive sheave extends substantially horizontally.

Attention is directed to Mitsui who teaches his drive device (7, 8) mounted in an upper portion of his hoistway (1) whereby his drive device is disposed so that a rotating shaft of his drive sheave extends substantially vertically, thereby removing the drive

device from a hoistway pit of conventional machine-roomless elevators wherein the pits are prone to flooding as well as minimize the installed space (hoistway height, Para. 3).

It would have been obvious to one of ordinary skill in the art to modify the reference of Masumoto with the teachings of Mitsui to eliminate a source causing (machine) downtime without impacting, if not reducing, the installation space.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno in view of Kamioka and in further view of Hymans (US 2,270,441).

Mizuno and Kamioka are silent regarding a safety device.

Attention is directed to Hymans who teaches his safety device (17) disposed at least partially within his groove portion of his vertical column (18) as seen in a vertical projection plane.

It would have been obvious to one of ordinary skill in the art to modify the reference of Mizuno and Kamioka with the teaching of Hymans to provide a safety device for emergencies.

Allowable Subject Matter

Claims 4 – 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 4 - 6 contain allowable subject matter because the teachings of the prior art of record taken as a whole do not show or render obvious the combination set forth including the "...the recess further includes a third recess provided in a corner portion between the rear face and the first side face, and a fourth recess provided in a corner portion between the front face and the second side face..."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Niigata Engineering Co. Ltd. (JP 50-124063) and Teramoto et al (US 2004/0007428 A1) is cited for reference of a car having first, second, third and fourth chamfered portions located at positions in pairs at their respective diagonal of the cage, as well as first, second, third and fourth guide rails (4) disposed within a hoistway and in opposition to a respective chamfered portion; and an elevator apparatus comprising first and second elevator cars and car guide rails positioned diagonally at corners of their respective elevator car, respectively.

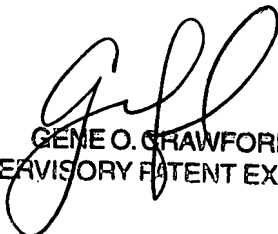
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Kruer whose telephone number is 571.272.5913. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on 571.272.6911. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217.9197 (toll-free).

SHK

13 May 2007


GENE O. CRAWFORD
SUPERVISORY PATENT EXAMINER